Water Temperature Protocol for Thermometer Probes

Field Guide

Task

Measure the temperature of your water using a calibrated meter and thermometer probe.

What You Need

- ❑ *Hydrology Investigation Data Sheet*
- ❑ Calibrated meter and probe
- ❑ Pen or pencil
- ❑ Clock or watch
- ❑ Latex gloves

In the Field

1. Make sure that your temperature probe and meter have been calibrated within the last 24 hours (see *Calibrating the Hydrology Thermometer Lab Guide*)
2. Fill out the top portion of your *Hydrology Investigation Data Sheet.*
3. Put the probe or the into the sample water to a depth of 10 cm.
4. Leave the probe in the water for three minutes.
5. Read the temperature on the meter without removing the probe from the water.
6. Let the thermometer probe stay in the water sample for one more minute.
7. Read the temperature again. If the temperature has not changed, go to Step 8. If the temperature has changed since the last reading, repeat Step 6 until the temperature stays the same.
8. Record the temperature on the *Hydrology Investigation Data Sheet.*
9. Have two other students repeat the measurement with new water samples.
10. Calculate the average of the three measurements.
11. All temperatures should be within 1.0° C of the average. If they are not, repeat the measurement.